

SEP 28 1978

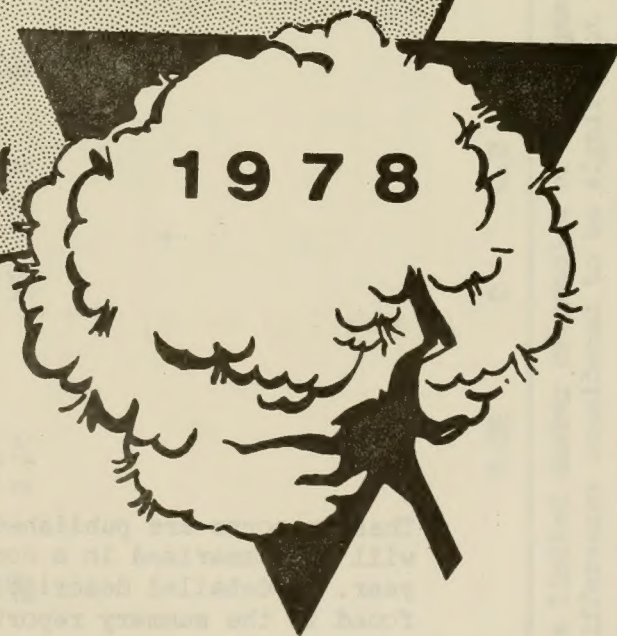
I.F.A.S. - Univ. of Florida

## Cotton Fiber and Processing Test Results



CROP of

1978



Agricultural Marketing Service  
U.S. DEPARTMENT OF AGRICULTURE  
Memphis, Tenn. 38122 September 22, 1978



## COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1978

### Discussion of Test Results

Short staple samples tested from the Southwestern Area through September 15 this season are shorter and finer than a year ago, according to the Cotton Division, Agricultural Marketing Service, USDA. Cottons tested to date are stronger at zero gage tests and slightly weaker at 1/8" gage tests. Both Shirley Analyzer nonlint content and picker and card waste are considerably higher than a year ago. Yarns spun from these samples are weaker, but have higher appearance grades. Yarn imperfections are fewer than a year ago. The average spinning potential yarn number is lower.

Medium staple samples tested from the Southwest show cotton fibers to be slightly shorter, coarser and stronger than a year ago. Both Shirley Analyzer nonlint content and picker and card waste are higher than last season. Yarns spun from these samples are weaker and have lower appearance grades. The average spinning potential yarn number is lower this year.

-----

These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season.<sup>1/</sup> These reports are available on request from the Standards Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN 38122.

1/ Summary of Cotton Fiber and Processing Test Results, Crop of 1977, USDA, AMS, Cotton Division, August 1978.

Table 1.--Cotton: Averages of fiber and processing tests from selected gin points in the United States through September 15, 1978 1/

Staple group Area, and Crop year	Lots tested	Fiber test results					Processing test results				
		Fibrograph		Mike finess		Fiber strength		S A nonlint		P & C waste	
		2.5% span	Inches	Pct.	Rdg.	Zero gage	1/8" gage	Pct.	G/tex	Pct.	Index
	No.					Mpsi					
Short Staple:											
Southwest	4	.98		45	3.8	91	22	3.3	5.2	102	11
1977	6	.92		45	3.7	94	21	4.2	6.9	93	8
1978											24
Medium Staple:											
South Central	2	1.10		46	4.4	90	23	2.6	5.2	110	16
1977	-	-		-	-	-	-	-	-	-	-
1978											64
Southwest											
1977	19	1.06		46	4.2	83	22	3.3	5.5	108	15
1978	28	1.05		46	4.4	89	23	4.5	5.8	101	16
											62
											88
											3
											51
Significant difference 2/	0.02	2	0.2	2	1	0.5	0.5	4(22s)	5	2	3

1/ Based on a limited number of samples of modal quality

2/ Minimum differences considered to be significant for comparisons in this table.

3/ Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument.



Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1978

Production Area, Classification & Sample Number				Fiber Test Results										Processing Test Results - Carded Yarns											
No	Grade	Name & Code	Stple	Digital Fibrograph		Mike	Fiber Strength		Elon-gat'n 1/8"	S.A. Non-lint		Color Raw Stock		P & C Waste	Strength		Elongation		Appearance Index		Imperfect's Neps/M Yards		Spin. Potent-ial		
				2.5% span	Unif		Zero Gage	1/8" Gage		Pct	Pct	Gra	Yel		8s or 74 tx	Lbs	Pct	Pct	8s or 74 tx	22sor 27 tx	No	No		8s or 74 tx	22sor 27 tx
32s																									
SOUTHWEST AREA																									
CENTRAL TEXAS																									
BRANDON																									
1	MID		31	29	0.90	45	3.5	93	LANKART 611	22	5.6	3.6	2	4	7.2	272	89	7.0	6.2	120	120	25 <sup>1/</sup>	(2)	6(10) <sup>1/</sup> 32	
ITASCA																									
1	MID	LT SP	32	30	0.96	46	4.4	94	LANKART LX571	22	4.8	5.3	2	4	8.0 <sup>2/</sup>	278	91	6.6	5.5	120	120	31	(6)	13(30)36	
ROSEBUD																									
1	MID	LT SP	32	30	0.89	44	3.5	93	LANKART 57	20	4.8	3.6	1	4	5.4 <sup>2/</sup>	263	87	6.5	5.5	120	120	24	(2)	8(30)32	
2	MID	LT SP	32	30	0.90	45	3.4	91		19	5.1	3.8	1	4	5.8 <sup>2/</sup>	273	92	6.6	5.6	120	120	22	(4)	10(48)35	
WACO																									
1	SLM		41	30	0.93	44	3.5	97	LANKART LX571	20	4.7	4.7	2	4	7.0 <sup>2/</sup>	284	98	6.6	5.8	120	120	21	(6)	7(12)38	
2	SLM		41	30	0.94	46	3.8	97		21	4.6	4.0	2	4	6.8 <sup>2/</sup>	283	99	6.4	5.8	120	130	22	(10)	7(12)41	

<sup>1/</sup> Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument.

<sup>2/</sup> Cotton stuck to processing rolls.

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1978

Production Area, Classification				Fiber Test Results										Processing Test Results - Carded Yarns									
Sample Number		Digital Fibrograph		Fiber Strength		Elon-gat'n		S.A. Non-Lint		Color Raw Stock		P & C Waste		Strength		Elongation		Appearance Index		Imperfct'ns Neps/M Yards		Spin. Poten-tial	
No	Grade	2.5% span	Unif.	Zero Gage	1/8" Gage	Pct	Pct	Lint	Yel	No	No	Pct	Pct	Lbs	Lbs	Pct	Pct	No	No	No	No	No	No
Name & Code		32s	In	Pct	Rdg	Mpsi	G/tex	Pct	Yel	No	No	Pct	Pct	Lbs	Lbs	Pct	Pct	No	No	No	No	No	No
SOUTHWEST AREA																							
SOUTH TEXAS																							
EAST BERNARD																							
3	MID	31	33	1.02	46	4.8	92	5.1	2.4	1	4	5.4	80 PERCENT	96	28	5.5	3.8	90	70	14	(84)	11	(306) <sup>1/2</sup>
GANADO																							
1	S LM	41	34	1.07	46	4.5	91	6.2	3.2	1	3	5.6	95 PERCENT	102	31	6.3	4.4	80	60	19	(84)	15	(342)50
2	S LM	41	34	1.07	47	5.1	91	5.3	4.0	2	3	5.6		103	33	6.4	4.7	80	70	19	(136)	16	(400)52
HARGILL																							
3	S LM	41	33	1.04	46	4.4	97	4.9	2.0	3	4	5.4	80 PERCENT	100	32	4.9	3.8	80	60	16	(58)	13	(370)47
SANTA ROSA																							
3	S LM	41	34	1.09	48	4.9	91	5.3	3.0	1	3	5.5	100 PERCENT	109	37	5.8	4.5	80	70	13	(84)	7	(290)61
TAFT																							
3	S LM	51	33	1.05	44	4.0	85	5.7	4.7	2	3	7.7	95 PERCENT	107	33	6.3	4.6	70	60	26	(134)	18	(416)53
CENTRAL TEXAS																							
AQUILLA																							
1	MID	31	30	0.90	43	3.3	94	4.7	3.8	1	4	7.2	100 PERCENT	65	23	2/4.5	4.7	70	60	18	(66)	15	(242)25
2	MID	31	31	0.98	45	4.5	92	5.2	3.5	1	4	6.1		86	26	3/5.3	4.3	80	70	14	(76)	12	(348)39
BATESVILLE																							
2	S LM	41	34	1.10	45	4.7	85	5.5	3.3	1	4	6.0	95 PERCENT	102	33	6.2	4.8	90	70	15	(90)	10	(306)49
FERRIS																							
1	S LM	41	31	0.95	43	3.6	98	4.7	4.2	3	4	8.3	75 PERCENT	76	23	3/4.8	4.0	70	60	24	(52)	18	(298)36
NAVASOTA																							
1	MID LT SP	32	34	1.10	47	5.0	85	6.2	2.3	2	4	3.8	100 PERCENT	112	37	6.5	4.6	110	80	9	(40)	9	(242)57

1/ Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument.

2/ End breakage too high to spin 50s yarn. 36s yarn spun and strength adjusted to equivalent of 50s.

3/ End breakage too high to spin 50s yarn. 44s yarn spun and strength adjusted to equivalent of 50s.



